

INTERNATIONAL SEARCH REPORT

International Application No
/IB2005/000927A. CLASSIFICATION OF SUBJECT MATTER
A61K39/295

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, BIOSIS, EMBASE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category ^a | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------------------|---|-----------------------|
| X | <p>FERNÁNDEZ J ET AL: "Randomized trial of the immunogenicity of fractional dose regimens of PRP-T Haemophilus influenzae type b conjugate vaccine." THE AMERICAN JOURNAL OF TROPICAL MEDICINE AND HYGIENE. APR 2000, vol. 62, no. 4, April 2000 (2000-04), pages 485-490, XP002987492 ISSN: 0002-9637</p> <p>page 485, right-hand column, paragraph 3 - page 486, left-hand column, paragraph 2 page 488, left-hand column, paragraph 2</p> <p>----- -/-</p> | 1, 3, 5-8, 16 |



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

& document member of the same patent family

Date of the actual completion of the International search

16 November 2005

Date of mailing of the International search report

13/12/2005

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|----------|--|-----------------------|
| X | NICOL M ET AL: "HAEMOPHILUS INFLUENZAE TYPE B CONJUGATE VACCINE DILUTED TENFOLD IN DIPHTHERIA-TETANUS-WHOLE CELL PERTUSSIS VACCINE: A RANDOMIZED TRIAL" PEDIATRIC INFECTIOUS DISEASE JOURNAL, WILLIAMS & WILKINS, BALTIMORE, MD, US, vol. 21, no. 2, February 2002 (2002-02), pages 138-141, XP008052412 ISSN: 0891-3668 page 139, left-hand column, paragraph 4 page 140, right-hand column, paragraph 2 ----- | 1, 3, 5-8, 16 |
| Y | US 2003/180316 A1 (BOUTRIAU DOMINIQUE ET AL) 25 September 2003 (2003-09-25) page 2 - page 3 ----- | 2, 4, 9-15 |
| Y | AMIR J ET AL: "Immunogenicity and safety of a liquid combination of DT-PRP-T vs Tyophilized PRP-T reconstituted with DTP" VACCINE, BUTTERWORTH SCIENTIFIC. GUILDFORD, GB, vol. 15, no. 2, February 1997 (1997-02), pages 149-154, XP004054364 ISSN: 0264-410X page 149 - page 150 ----- | 2, 4, 9-15 |
| P, X | TAMM E ET AL: "Double-blind study comparing the immunogenicity of a licensed DTwPHib-CRM197 conjugate vaccine (Quattvaxem(TM)) with three investigational, liquid formulations using lower doses of Hib-CRM197 conjugate" VACCINE, BUTTERWORTH SCIENTIFIC. GUILDFORD, GB, vol. 23, no. 14, 25 February 2005 (2005-02-25), pages 1715-1719, XP004739805 ISSN: 0264-410X the whole document ----- | 1-16 |
| A | KANRA GÜLER ET AL: "Effect of aluminum adjuvants on safety and immunogenicity of Haemophilus influenzae type b-CRM197 conjugate vaccine." PEDIATRICS INTERNATIONAL : OFFICIAL JOURNAL OF THE JAPAN PEDIATRIC SOCIETY. JUN 2003, vol. 45, no. 3, June 2003 (2003-06), pages 314-318, XP002354341 ISSN: 1328-8067 the whole document ----- | 1-16 |
| A | US 6 333 036 B1 (ARMINJON FRANCOIS ET AL) 25 December 2001 (2001-12-25) the whole document ----- | 1-16 |

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
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| A | "DTP-HBOC DIPHTHERIA AND TETANUS TOXOIDS AND PERTUSSIS VACCINE ADSORBED AND HAEMOPHILUS B CONJUGATE VACCINE" DRUGS OF TODAY / MEDICAMENTOS DE ACTUALIDAD, J.R. PROUS SS.A. INTERNATIONAL PUBLISHERS, ES, vol. 29, no. 7, 1993, pages 463-464, XP008052438 ISSN: 0025-7656 the whole document ----- | 1-16 |
| A | WO 97/00697 A (SMITHKLINE BEECHAM BIOLOGICALS S.A; PEETERMANS, JULIEN; HAUSER, PIERRE) 9 January 1997 (1997-01-09) the whole document ----- | 1-16 |
| A | BLACK S B ET AL: "Safety of combined oligosaccharide conjugate Haemophilus influenzae type b (HbOC) and whole cell diphtheria-tetanus toxoids-pertussis vaccine in infancy. The Kaiser Permanente Pediatric Vaccine Study Group." THE PEDIATRIC INFECTIOUS DISEASE JOURNAL. DEC 1993, vol. 12, no. 12, December 1993 (1993-12), pages 981-985, XP008052439 ISSN: 0891-3668 the whole document ----- | 1-16 |
| A | LAGOS R ET AL: "Economisation of vaccination against Haemophilus influenzae type b: a randomised trial of immunogenicity of fractional-dose and two-dose regimens" LANCET THE, LANCET LIMITED. LONDON, GB, vol. 351, no. 9114, 16 May 1998 (1998-05-16), pages 1472-1476, XP004834459 ISSN: 0140-6736 the whole document ----- | 1-16 |
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
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| A | <p>NOLAN T ET AL: "A combined liquid Hib (PRP-OMPc), hepatitis B, diphtheria, tetanus and whole-cell pertussis vaccine: controlled studies of immunogenicity and reactogenicity" VACCINE, BUTTERWORTH SCIENTIFIC. GUILDFORD, GB, vol. 19, no. 15-16, 28 February 2001 (2001-02-28), pages 2127-2137, XP004316954 ISSN: 0264-410X page 2129, right-hand column, last paragraph - page 2130, left-hand column, paragraph 1</p> <p>-----</p> | 1-16 |
| A | <p>PINES E ET AL: "New acellular pertussis-containing paediatric combined vaccines" VACCINE, BUTTERWORTH SCIENTIFIC. GUILDFORD, GB, vol. 17, no. 13-14, January 1999 (1999-01), pages 1650-1656, XP004158300 ISSN: 0264-410X page 1653, right-hand column, paragraph 2</p> <p>-----</p> | 1-16 |

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

Although claim 16 is directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

National Application No
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| Patent document cited in search report | | Publication date | | Patent family member(s) | Publication date |
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